Chapter 15. Other Required Analyses

In addition to the foregoing analysis of project-related impacts in various environmental topic areas, NEPA and CEQA require additional analysis of cumulative impacts, irreversible and irretrievable commitments of resources, and the relationship between short-term uses of the environment and the maintenance and enhancement of long-term productivity.

Cumulative Impacts

The methodology used to develop the cumulative impact analysis included reviewing the current general plans for the City of Novato and Marin County, the Bel Marin Keys Unit V final EIR/EIS (Environmental Science Associates 1993), the Hamilton Army Airfield Disposal and Reuse EIS (U.S. Army Corps of Engineers 1996a), and the Oakland Harbor navigation improvement (50-foot) project final EIR/EIS (U.S. Army Corps of Engineers and the Port of Oakland 1998d). The multiple source approach provided information about whether the proposed project would contribute to significant cumulative effects.

Because the BMKV Scenario addresses the longest potential phase of restoration of tidal marsh adjacent to San Pablo Bay, it has been used as the basis for addressing cumulative impacts for this EIR/EIS. That is, this scenario is reviewed in the context of the other plans and projects discussed above. (Except where indicated, Alternatives 2-5 would result in less severe impacts because the area being restored would be smaller under any of these alternatives and the period of restoration would be shorter.)

Because the BMKV Scenario would result in a substantial benefit to the environment in terms of biological resources and does not involve the development of the site for intensive land uses, there are very few significant cumulative impacts associated with the project. The following sections support this conclusion on a topic-by-topic basis.

Geology and Soils

The project area is one of the most seismically active regions of the nation. The development of the BMKV Scenario is not, however, expected to exacerbate or contribute to seismic hazards; the requirements to conduct geotechnical investigations and develop appropriate design for the levees would fully address this issue. Furthermore, this scenario would preclude development of a large site for urban development and, therefore, substantially limits the exposure of people to seismic hazards.

Hydrology and Water Quality

Implementation of the BMKV Scenario along with other projects envisioned in the area would result in potential water quality impacts on San Pablo Bay during construction and operation. Over the long term as the wetlands develop, however, water quality is expected to improve compared to existing conditions because functioning wetlands filter contaminants from runoff and enhance water quality, whereas under current conditions, the bay and other water bodies receive contaminated runoff from the HAAF, SLC, and BMKV parcels.

Furthermore, because the BMKV Scenario envisions the use of dredged material for wetlands, and, therefore, reduces the potential for disposing of the material in the bay or ocean, this project will result in a net benefit to water quality of the bay and ocean. This benefit is one of the objectives of the LTMS.

Public Health

Implementation of the BMKV Scenario would increase the potential for mosquito production but would not contribute to a significant cumulative impact because mosquito abatement practices are implemented as needed (see Chapter 7 for details), thereby eliminating large-scale, cumulative problems.

Biological Resources

The BMKV Scenario would substantially increase the available acreages of important tidal and nontidal habitat available for sensitive wildlife species. Therefore, it is expected to be cumulatively beneficial for biological resources.

Land Use and Public Services

As described in Chapter 9, the BMKV Scenario would contribute to the loss of agricultural land in oat hay production in Marin County, but the loss is expected to be offset by production in Sonoma County. Nevertheless, because of the difficulty of adequately mitigating for the loss of agricultural lands in the region, this scenario is considered to contribute to a cumulative regional loss of agricultural land. Implementation of Alternative 2, 3, 4, or 5 would avoid this impact.

The BMKV Scenario would not contribute to a significant cumulative impact on public services because it would not result in an increase in population, housing, or economic growth that would create additional demand for these services.

Traffic, Air Quality, and Noise

Construction traffic would represent a short-term minor increase in traffic that could contribute to traffic congestion on roadways in the City of Novato and adjacent areas and on state facilities; because this traffic, although temporary, would exacerbate congestion on some roadways that are already operating at an unacceptable LOS (see Chapter 11), it is recommended that a construction traffic plan be implemented as part of the final design to ensure that construction traffic is routed through appropriate intersections (i.e., those that are operating at an acceptable LOS) and is concentrated during nonpeak hours.

The BMKV Scenario is expected to be below *de minimis* thresholds levels for ozone precursors and, therefore, by definition would not cause or contribute to any new ambient air quality standard violation, increase the severity or frequency of any existing standard violation, or delay timely attainment of any standard (see Chapter 12). In addition, as discussed in the Oakland Harbor navigation improvement project EIR/EIS, cumulative air quality emissions from dredging, transport, reuse, disposal and other construction activities for that project were found to have a less-than-significant cumulative impact (which considered this project site for disposal). Therefore, this project is not expected to result in a cumulative impact on ozone precursors. However, PM10 impacts under the BMKV scenario would contribute to a cumulative PM10 impact, which can be mitigated to a less-than-significant level by controlling PM10 emissions in accordance with BAAQMD standards.

The BMKV Scenario is not expected to contribute to significant long-term cumulative noise impacts. It would, however, exacerbate existing noise levels at sensitive receptors during construction; these noise levels can be reduced, but not to a less-than-significant level, through appropriate construction practices.

Hazardous Substances, Waste, and Site Remediation

Proposed transfer of the HAAF and SLC parcels from Army ownership to the Coastal Conservancy is contingent on cleanup of hazardous substances; therefore, the BMKV Scenario would not exacerbate or cumulatively contribute to hazardous materials impacts.

Cultural Resources

Implementation of the BMKV Scenario could contribute to a cumulative loss of cultural resources in the region if appropriate mitigation measures are not implemented through the planning process. Because

mitigation measures for cultural resources are expected to be implemented through CEQA, NEPA, and the Section 106 process for discretionary actions, however, this impact is considered less than significant.

Irreversible and Irretrievable Commitment of Resources

The proposed project would result in the irretrievable commitment of fossil fuels and other energy sources needed to build, operate, and maintain the wetlands. The restoration of the site to wetlands, however, is not considered an irreversible commitment because the landscape could once again be converted to other land uses in the future, even after restoration.

Relationship between Short-Term Uses of the Environment and the Maintenance and Enhancement of Long-Term Productivity

Short-term uses of the environment that would occur with restoration include the impacts on existing wetlands and habitat and those from other construction-related activities. However, in the long term, the site is expected to be substantially more productive for habitat and wildlife values.